

~~18~~¹¹ (previously added) The modified biological molecule of claim ~~17~~¹⁰, wherein the biological molecule comprises a polypeptide or a peptide.

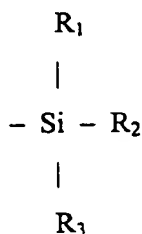
~~19~~¹² (previously added) The modified biological molecule of claim ~~17~~¹⁰, wherein the biological molecule comprises a polysaccharide or a saccharide.

~~20~~¹³ (previously added) The modified biological molecule of claim ~~17~~¹⁰, wherein the biological molecule comprises a lipid.

~~21~~¹⁴ (previously added) The modified biological molecule of claim ~~17~~¹⁰, wherein the biological molecule comprises a small molecule.

~~22~~¹⁵ (previously added) The modified biological molecule of claim ~~17~~¹⁰, wherein the amino group is a primary amine.

~~23~~¹⁶ (previously amended) The modified biological molecule of claim ~~17~~¹⁰, wherein the alkoxy silane is selected from the group consisting of $-\text{Si}(\text{OCH}_3)_3$, $-\text{Si}(\text{OC}_2\text{H}_5)_3$ and



wherein R_1 , R_2 and R_3 are selected from the group consisting of $-\text{H}$, $-\text{CH}_3$, $-\text{OCH}_3$, and $-\text{OC}_2\text{H}_5$, and at least one of R_1 , R_2 or R_3 is either $-\text{OCH}_3$ or $-\text{OC}_2\text{H}_5$.

~~24~~¹⁷ (previously added) The modified biological molecule of claim ~~17~~¹⁰, wherein the compound is 3-aminopropyltriethoxysilane.

~~25~~¹⁸ (previously amended) A microarray comprising:
an underivatized solid support, and

modified biological molecules covalently bound to a compound having the formula: $\text{R}_1\text{—X—R}_2$, wherein R_1 comprises an amino group, R_2 comprises an alkoxy silane group; and X comprises a moiety linking the amino group and the alkoxy silane group, immobilized onto the underivatized solid support.

~~26~~¹⁹ (previously amended) The microarray of claim ~~25~~¹⁸, ~~84~~⁴², ~~85~~⁴³ or ~~86~~⁴⁴, wherein the solid support comprises hydroxyl groups.

~~27~~²⁰ (previously amended) The microarray of claim ~~25~~¹⁸, ~~84~~⁴², ~~85~~⁴³ or ~~86~~⁴⁴, wherein the solid support comprises glass.

- ²¹
~~28.~~ (previously amended) The microarray of claim ^{18 42 43 44}25, 84, 85 or 86, wherein the solid support comprises a surface selected from the group consisting of a quartz, a mica, an alumina, a titania, an SnO₂, an RuO₂, and a PtO₂.
- ²²
~~29.~~ (previously amended) The microarray of claim ^{18 42 43 44}25, 84, 85 or 86, wherein the solid support comprises a metal oxide surface.
- ²³
~~30.~~ (previously amended) The microarray of claim ^{18 42 43 44}25, 84, 85 or 86, wherein the solid support comprises a compound selected from the group consisting of a polystyrene, a polyester, a polycarbonate, a polyethylene, a polypropylene, and a nylon.
- ²⁴
~~31.~~ (previously amended) The microarray of claim ^{18 42 43 44}25, 84, 85 or 86, wherein biological molecules are immobilized onto the solid support in orderly, discrete spots.
- ²⁵
~~32.~~ (previously amended) The microarray of claim ¹⁸25, wherein the discrete spots are about 50 microns in diameter.
- ²⁶
~~33.~~ (previously amended) A modified biological molecule, wherein the biological molecule is prepared by a process comprising the steps of:
- providing a biological molecule comprising a guanine base or a cytosine base;
 - reacting the guanine base or the cytosine base with N-bromosuccinimide at pH about 8.0 to form a brominated biological molecule; and
 - reacting the brominated biological molecule with a silane having the formula –HN–(CH₂)_n–Si(OR)₃, wherein n = 3, 4, 5, 6, 7, 8 or 9.
- ²⁷
~~34.~~ (previously added) The modified biological molecule of claim ²⁶33, wherein R is selected from the group consisting of –CH₃, –C₂H₅, and –C₃H₇.
- ²⁸
~~35.~~ (previously added) A modified biological molecule, wherein the biological molecule is prepared by a process comprising the steps of:
- providing a biological molecule;
 - providing a compound having a formula

